



UNITED STATE DEPARTMENT OF COMMERCE Pat nt and Trad mark Offic

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APPLICATION NO.	FILING DATE	FIRST NAM	ED INVENTOR		ATTORNEY DOCKET NO.
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PILLSBURY MADISON & SUTRO INTELECTUAL PROPERTY GROUP				ART UNIT	PAPER NUMBER
1100 NEW YO NINTH FLOOR WASHINGTON	EAST TOWER			1644 DATE MAILED:	10
					03/20/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

Applicant(s)

09/257,188

Glenn et al.

Examiner

G. R. Ewoldt

Group Art Unit 1644



X Responsive to communication(s) filed on Jan 16, 2001	·		
This action is FINAL.			
Since this application is in condition for allowance except for f in accordance with the practice under <i>Ex parte Quayle</i> , 1935			
A shortened statutory period for response to this action is set to a sister longer, from the mailing date of this communication. Failure to application to become abandoned. (35 U.S.C. § 133). Extension 37 CFR 1.136(a).	respond within the period for response will cause the		
Disposition of Claims			
X Claim(s) <u>1-59</u>	is/are pending in the application.		
Of the above, claim(s)	is/are withdrawn from consideration.		
Claim(s)			
Claim(s)			
Claim(s)			
X Claims 1-59			
See the attached Notice of Draftsperson's Patent Drawing The drawing(s) filed on	d to by the Examiner. isapproveddisapproved. Inder 35 U.S.C. § 119(a)-(d). Ithe priority documents have been Ithernational Bureau (PCT Rule 17.2(a)).		
Attachment(s) Notice of References Cited, PTO-892 Information Disclosure Statement(s), PTO-1449, Paper Not Interview Summary, PTO-413 Notice of Draftsperson's Patent Drawing Review, PTO-948 Notice of Informal Patent Application, PTO-152			

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

- 1. Applicant's election of Group III, Claims 1-37, 39-46, 50-51, 55, and 57 and the adjuvant species ADP-ribosylating exotoxin in Paper No. 9, filed 1/16/01, is acknowledged. Upon further consideration an additional species election is required. The previous restriction requirement and election are therefore wadated. A new restriction follows. The Examiner apologizes for any delay or inconvenience to the Applicant.
- 2. Restriction to one of the following inventions is required under 35 U.S.C. § 121:
- I. Claims 1-34, 36-37, 39-46, 50-51, 55, and 57, drawn to a method of inducing an enhanced immune response to a tumor antigen, classified in Class 424, subclasses 277.1, 278.1 and 183.1.
- II. Claims 1-34, 37, 39-46, 50-51, 55, and 57, drawn to a method of inducing an enhanced immune response to an antigen derived from a normal cell, classified in Class 424, subclasses 175.1 and 233.1.
- III. Claims 1-37, 39-46, 50-51, 50, and 67, drawn to a method of inducing an enhanced immune response to a bacterial antigen, classified in Class 414, subclasses 134.1, 278.1 and 283.1.
- IV. Claims 1-46, 50-51, 58, and 57, drawn to a method of inducing an enhanced immune response to a viral antigen, classified in Class 414, subclasses 104.1, 278.1 and 288.1.
- V. Claims 1-37, 39-46, 50-51, 55, and 67, drawn to a method of inducing an enhanced immune response to a fungal antigen, classified in Class 424, subclasses 278.1 and 283.1.
- VI. Claims 1-37, 39-46, 50-51, 55, and 57, drawn to a method of inducing an enhanced immune response to a parasite, classified in Class 424, subclasses 365.1, 278.1 and 2 3.1.
- VII. Claims 1-37, 39-46, 80-81, 88, and 87, drawn to a method of inducing an enhanced immune response to an autoantigen, classified in Class 404, subclasses 178.1 and 283.1.
- VIII. Claims 1-37, 30-46, 50-51, 55, and 57, drawn to a method of inducing an enhanced immune response to an allergen, classified in Class 424, subclasses 275.1, 278.1 and 283.1.

- IX. Claims 1-34, 36, 39-49, 50-51, 55, and 57, drawn to a method of inducing an enhanced immune response to a tumor antigen encoded by a nucleic acid, classified in Class 424, subclasses 273.1 and 283.1 and Class 514, subclass 44.
- M. Claims 1-34, 39-49, 50-51, 55, and 57, drawn to a method of inducing an enhanced immune response to an antigen derived from a normal cell encoded by a nucleic acid, classified in Class 434, subclasses 278.1 and 283.1 and Class 514, subclass 44.
- $\rm MI.$ Claims 1-36, 39-49, 50-51, 95, and 57, drawn to a method of inducing an enhanced immune response to a bacterial antigen encoded by a nucleic acid, classified in class 414, subclasses 278.1 and 288.1 and 21ass 514, subclass 44..
- MII. Claims 1-36, 36-46, 50-51, 55, and 57, drawn to a method of inducing an enhanced immune response to a viral antigenent ded by a nucleic acid, classified in Class 424, subclasses 176.1 and 183.1 and Class 514, subclass 44.
- MITT. Claims 1-36, 39-49, 50-81, 55, and 57, drawn to a method of inducing an enhanced immune response to a fungal antigen encoded by a nucleic acid, classified in Class 424, subclasses 278.1 and 183.1 and Class 514, subclass 44.
- MIV. Claims 1-35, 39-49, 50-51, 55, and 57, drawn to a method of inducing an enhanced immune response to a parasite encoded by a nucleic acid, classified in Class 424, subclasses 275.1 and 185.1 and 185.1
- MV. Claims 1-36, 39-49, 50-51, 55, and 57, drawn to a method of inducing an enhanced immune response to an autoantigen encoded by a nucleic acid, classified in Class 424, subclasses 273.1 and 183.1 and Class 514, subclass 44.
- MVI. Claims 1-36, 39-49, 50-51, 55, and 57, drawn to a method of inducing an enhanced immune response to an allergen encoded by a nucleic acid, classified in Class 404, subclasses 178.1 and 188.1 and Class 514, subclass 44.
- MVII. Claims 52-54, drawn to an article for vaccine administration, classified in Class 424, subclasses 278.1 and 283.1 and Class 514, subclass 44.
- MYTTI. Claim 56, drawn to a method of preventing a disease, classified in Class 424, subclasses 278.1 and 285.1 and Class 114, subclass 44.

XIX. Claims 58-59, drawn to a composition, classified in Class 424, subclasses 278.1 and 283.1 and Class 514, subclass 44.

The inventions are distinct, each from the other because:

- 3. Inventions I-KVI and KVIII are different methods. These inventions require different reagents acting through different process steps, with different modes of operation, different endpoints, and/or different outcomes. Therefore they are patentably distinct.
- Inventions XVII and XIX are related as mutually explusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP \$ 306.04(h), 3rd paragraph), and the species are patentably distinct (MPEP 5 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a vaccine, and the inventions are deemed patentably distinct since there is nothing en this repord to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence new of record showing the species to be obvious wariants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a refection under 35 U.S.C. 103(a) of the other invention.
- 5. Inventions XIX and (I-XVI and XVIII) are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (M.P.E.P. § 806.05(h)).

In the instant case, the product as claimed can be used in a materially different process such as in in vitro assays.

above and Groups I-XIX have adquired a separate status in the art as shown by their different classification and/or the searches are not co-extensive and because the Groups encompass divergent subject matter, restriction for examination purposes as indicated is proper.

- 7. Should Applicant elect any of Groups I-MVI, Applicant is further required under 35 U.S.C. § 121 to elect a **specific** method of pretreatment comprising:
- A) a **specific** adjuvant, such as one listed in Claims 22 or 44-46.
- B) a **specific** "enhancer", such as alcohol, acetone, a detergent, a salicylate, or a "surface disrupting device".
- A. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or exertify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or almission may be used in a rejection under 35 U.S.C. 193(a) of the other invention.

The different adjuvants, such as cholera toxin or themokines, elicit different immune responses of different classes. The different enhancers, such as a detergent and a surface disrupting device, enhance the penetration of an antigen and adjuvant in different ways, i.e., chemical versus mechanical. Therefore, the species of Groups 1-MVI are independent and patentable over one another.

- 3. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CSR 1.143).
- 10. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. O 1.48(b) if one or more of the correctly named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 C.F.F. G 1.48(b) and by the fee required under 37 C.F.R. O 1.17(h).
- 11. Applicant is advised that no references were received with the IDS form FTO-1449, received 12/29/99. Submission or resubmission of said references would expedite presecution.
- 17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerald Ewoldt whose telephone number is (703) 308-9805. The examiner can normally be reached Monday through Friday from 8:30 am to 5:00 pm. A message may be left on the examiner's voice mail

service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on (703) 309-3973. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 1600 receptionist whose telephone number is (703) 306-0196.

Papers related to this application may be submitted to Technology Center 1600 by facsimile transmission. Fapers should be faxed to Technology Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CM1 Fax Center telephone number is (703) 305-3014.

G.E. Ewoldt, Ph.D. Patent Examiner Technology Center 1600 March 19, 2001 Fatrick J. Nolan, Ph.D. Frimary Examiner

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